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PROGRAMME BUDGET FOR THE BIENNIUM 1994-1995

United Nations telecommunications system

Tenth report of the Advisory Committee on Administrative and Budgetary Questions

1. The Advisory Committee on Administrative and Budgetary Questions has considered the report of the Secretary-General on the United Nations telecommunications system (A/C.5/48/11 and Add.1). During the course of its consideration of the report the Advisory Committee met with representatives of the Secretary-General, who provided additional updated information. Subsequently, the Secretary-General submitted a revised report (A/C.5/48/11/Rev.1).

2. The United Nations telecommunications system was established pursuant to General Assembly resolution 240 (III) of 18 November 1948. At its thirty-ninth session, by resolution 39/237 A of 18 December 1984, the General Assembly, on the recommendation of the Advisory Committee, approved the development of an enhanced communications network for the United Nations.

3. The Advisory Committee recalls that the Secretary-General, in his report to the General Assembly at its forty-sixth session (A/C.5/46/5), had presented a description of the existing telecommunications facilities in the United Nations together with a detailed strategy for future developments. In its resolution 46/185 B of 20 December 1991, the Assembly, inter alia, took note of the report of the Secretary-General and endorsed the comments and recommendations of the Advisory Committee contained in its report (A/46/7/Add.12).

4. The Advisory Committee had indicated that the operational arrangements for implementation of a private global network needed to be further developed together with detailed cost estimates. Subsequently therefore, in April 1993, the Secretary-General submitted a report to the Advisory Committee (A/CN.1/R.1169) proposing a satellite backbone network. The response of the Advisory Committee to that report, while welcoming the benefits outlined in it

by the Secretary-General, indicated that final approval of the proposals would have to be sought from the General Assembly at its forty-eighth session. The text of the Advisory Committee's response is attached as annex I below.

Present status of the United Nations telecommunications network

5. In paragraph 8 of his report (A/C.5/48/11/Rev.1), the Secretary-General describes the existing United Nations telecommunications network, which basically consists of two parts. The first part consists of a series of commercially leased alternate voice and data (AVD) circuits and digital circuits for integrated voice and data services, as well as the use of commercial facilities through major carriers, including the facilities of the International Maritime Satellite Organization (INMARSAT). The second part comprises United Nations-owned satellite Earth stations ranging from 1.8 to 11 metre antennae, with circuits operating under a lease agreement with the International Telecommunications Satellite Organization (INTELSAT).

6. In March 1993, an amendment to the agreement for the leasing of space segment capacity authorized the expanded use of INTELSAT satellites by the United Nations. As a result, using its own network, the United Nations is in a position to provide telecommunications service to the United Nations system.

Network options considered

7. A study carried out by the United Nations, in close association with the International Telecommunication Union (ITU), after considering a variety of technologies, concluded that a satellite-based telecommunications network with a terrestrial back-up would be the most cost-effective configuration for the United Nations and would also provide the quality and range of services required by the Organization to carry out its activities. The range of options considered in this connection is indicated in paragraph 10 of the report of the Secretary-General under consideration.

Shortcomings in the present system versus benefits of the proposed expanded network

8. The Advisory Committee was informed that there were several shortcomings in the telecommunications system presently being utilized, which the proposed satellite network would overcome. The most important of these shortcomings is the inability to provide, on a global basis, timely, adequate and efficient telecommunications support for peace-keeping and humanitarian and emergency operations. These operations currently rely very heavily on INMARSAT facilities, particularly in the early phases of a peace-keeping operation. Apart from technical "built-in" limitations, the operating costs are comparatively high. For example, the Advisory Committee was informed that the user charge per minute for INMARSAT and associated facilities averaged $6.50, and that an average of $40,000 per month per terminal is currently spent on INMARSAT user charges. Furthermore, the present leased facilities which are required to meet the administrative needs of the Organization, apart from being expensive, have a limited capacity to handle and transmit automated data. In areas where only the AVD circuits are available, for example, Nairobi and Addis Ababa, a major drawback is that at any given time the user has to choose

between voice or data transmission since the circuit cannot handle both at the same time. As indicated in paragraph 9 of the report of the Secretary-General and as further explained to the Advisory Committee, the commercial services currently being utilized entail high operating costs. The leased circuits have inherent limitations, in addition to which there are high costs and delays in the start-up of facilities for peace-keeping field missions. There is also a lack of flexibility for growth and reconfiguration in the present system.

9. The Advisory Committee was informed that with the recent amendment to the agreement, which lifted restrictions on INTELSAT-leased space by the United Nations, the Organization had a unique opportunity not only to expand its existing satellite telecommunications facilities but also to convert from the varied leased services to a United Nations-owned, totally integrated digital satellite network that would provide a rapid, reliable and economic response to the Organization's communication requirements. The Advisory Committee was informed that, in addition to the fact that the proposed expanded and integrated satellite network would be more efficient and cost-effective for the United Nations, its flexibility would enable the Organization either to expand or to reduce the system according to the Organization's needs. The various benefits of the proposed expanded satellite network are outlined in paragraphs 50 and 51 of the report of the Secretary-General.

10. The Advisory Committee was informed that improvements to and expansion of the existing United Nations-owned portions of the telecommunications system which have been under way have shown positive results in terms of efficiency and cost-avoidance. In support of this, the Advisory Committee was provided with an illustrative table comparing the current United Nations-network telephone rates with commercial rates (see annex II below). The Advisory Committee was informed that that table updated and replaced the information given in annex I of the report of the Secretary-General. The Advisory Committee believes that information should have been provided to explain the variations in unit costs and is of the opinion that there is a need for improvement in the collection of statistics with a view to providing a more accurate assessment of unit costs both to the United Nations and for those to be charged to other users. The Advisory Committee was informed that the United Nations-network rates were under review and would be subject to further downward revision.

Engineering and design considerations and proposals

11. The overall network design concept, after review of options and of specific United Nations telecommunications requirements, is described in paragraphs 24 to 33 of the report of the Secretary-General. For reasons outlined in paragraphs 24 and 25 of that report, it is proposed that the United Nations telecommunications system consist of stationary INTELSAT international business service-type (IBS) Earth stations to meet the heavy traffic requirements, such as for voice, data, facsimile and telex, and the portable very small aperture terminals (VSAT) service, which would respond to the diversity and ad hoc nature of peace-keeping activities and the needs of the specialized agencies as required. Thus, the present proposal would be an expansion and upgrading of the existing telecommunications network which would, in major part, involve a shift from INMARSAT to INTELSAT usage.

12. As indicated in paragraph 27 of the report, full connectivity of the United Nations telecommunications network would require the use of three geostationary satellites with three hub stations. However, for the short and medium-term requirements of the United Nations, the Secretary-General is proposing the use of only two satellites and the upgrading of the current Earth station at New York to serve as the primary hub station for the Atlantic Ocean region (AOR) satellite, and a second hub station at Geneva or Vienna for the Indian Ocean region (IOR) satellite.

13. The Advisory Committee was informed that the United Nations Headquarters hub in New York operates on the AOR satellite and covers North and South America, as well as Europe and Africa; the European hub would operate on both the AOR and the IOR satellites and would cover Europe and Asia from the United Kingdom of Great Britain and Northern Ireland to Japan, while also covering Africa and Australia. It would require two Earth stations, to be placed back-to-back in Europe, to inter-connect traffic between the Atlantic and Indian Ocean regions. The Advisory Committee was informed that it had not yet been decided whether the European hub station would be located at Geneva or Vienna.

14. As indicated in paragraph 31 of the report, the European hub stations will have the capability of not only providing services to ongoing peace-keeping missions such as the United Nations Operation in Somalia and the United Nations Protection Force, but to all future peace-keeping missions; with the installation of the European hub stations, the need to build a hub Earth station for each new peace-keeping or other field operation, as is the current practice, will be eliminated.

15. As indicated in paragraphs 32 and 33 of the report, each of the regional commissions will have an Earth station, to be connected to the major hub stations via the AOR and the IOR satellites. The Advisory Committee was informed that, in addition to the Earth station at Addis Ababa, an Earth station would also be required at Nairobi, not only because there were a number of United Nations offices at Nairobi but also because there was a lack of appropriate telecommunications infrastructure in the region.

16. The organizational and management structure is discussed in paragraphs 34 to 43 of the report; table 1 shows the distribution of the 54 posts in various locations (see para. 25 below). While the Advisory Committee does not object to the distribution of posts as shown in table 1 of the report, the Committee is concerned that the report does not clearly identify the area or individual post where the ultimate responsibility for the telecommunications project would rest. The Advisory Committee requested and was provided with an organizational chart of the Electronic Services Division of the Office of General Services, which is currently responsible for the telecommunications facilities within the United Nations. The Advisory Committee recommends that an individual be entrusted with the overall management of and responsibility for the project through its completion as outlined in the report of the Secretary-General. The Advisory Committee also recommends continued close cooperation between the Office of General Services and the Department of Peace-Keeping Operations, with a clear delineation of responsibilities between them.

Participation of the specialized agencies

17. In its letter of 15 July 1993 to the Secretary-General (see annex I below), the Advisory Committee had requested details on the participation of the specialized agencies in the proposed project. The Advisory Committee was informed by the representatives of the Secretary-General that at the present time the United Nations is the only entity within the United Nations system recognized by ITU as having the same rights and privileges for operating telecommunication services as a Member State which is a member of ITU. The Advisory Committee was further informed that if the specialized agencies were to share in the capital costs of the project this could be construed as ownership, and, as such, would contravene the terms of the agreement with ITU.

18. The Advisory Committee notes from paragraph 15 of his report that the Secretary-General believes that if the existing United Nations telecommunications network were to be expanded as proposed for the sole use of the United Nations, it would still prove cost-effective and provide the United Nations with efficient service, which could be extended to the specialized agencies as required.

19. While the Advisory Committee accepts the explanation regarding the non-participation of the specialized agencies in the capital costs of the expansion of the network, the Committee does not believe that the fee to be charged to the specialized agencies should be set at this stage; the Committee intends to revert to this matter in due course (see para. 10 above). The Advisory Committee believes that the proposal for a special account for the crediting of income from telecommunications operations as indicated in paragraph 66 of the report of the Secretary-General should be further examined and that, pending such examination, any income should be credited to miscellaneous income. The Advisory Committee intends to revert to this matter as well.

Project budget and implementation timetable

20. As shown in table 2 of the report of the Secretary-General, the estimated cost at current rates, on a biennial basis, for the enhanced satellite network is $20,772,300, of which $8,739,300 is capital expenditure and $12,033,300 is recurrent. However, in view of the delay in start-up due to the fact that the project has not yet been approved by the General Assembly, the 1994-1995 requirements, based on a phased implementation timetable, shown in paragraphs 46 to 49 of the report, would amount to $16,928,100, of which $8,188,800 would be recurrent and $8,739,300 non-recurrent.

21. As shown in table 5 of the report of the Secretary-General, the one-time non-recurrent cost of $8,739,300 is for (a) the acquisition of seven satellite Earth stations (two for the European hub station and one each at Addis Ababa, Bangkok, Santiago, Amman and Nairobi), (b) the upgrading of the New York Headquarters Earth stations, (c) a satellite monitoring, alarm and control system at New York and the European hub stations, (d) site preparation, installation and related costs at hub stations, and (e) the acquisition of a set of 15 small portable Earth stations (VSATs) (priced as at May 1994 at $50,000 each). The recurrent costs of $8,188,800 in 1994-1995, also based on the phased

implementation timetable, consist of staffing requirements ($4,545,000) and satellite leases ($3,643,800).

22. Proposed funding for the network and cost-sharing between the budgets of peace-keeping operations and the activities funded by the regular budget of the United Nations is discussed in paragraphs 60 and 61 of the report of the Secretary-General. Table 5 of the report sets out the estimated 1994-1995 cost and proposed funding of the enhanced telecommunications system. The Advisory Committee was informed that maintenance costs would only be incurred once the guarantee period for the Earth stations had elapsed.

Costs proposed to be assigned to the regular budget

23. The regular budget's share of the total recurrent costs of $8,188,800 for 1994-1995 amounts to $4,423,100 (see table 5 of the report of the Secretary-General). Of this amount, as indicated in paragraph 62 of the report, $4,116,100 is proposed to be met from existing resources, leaving a balance of $307,000 which relates to additional staff costs to be funded by the regular budget.

24. Of the total non-recurrent requirements of $8,739,300, it is proposed that $3,889,300 be borne by the regular budget, of which a provision of $1,134,500 relating to the non-recurrent costs of the satellite Earth stations at Addis Ababa and Bangkok have been included in the total cost of the construction of projects at those locations. Provisions for the non-recurrent costs for the Earth stations at Santiago, Amman and Nairobi, including related costs as set out in table 5 of the report, are estimated at $2,754,800 and are being requested under section 30 of the budget. The Advisory Committee notes the statement of the Secretary-General in paragraph 71 of his report that this request would constitute a reinstatement of his initial request, which amounted to $2,853,900, in the proposed programme budget for the biennium 1994-1995.

25. Funding for the 54 posts which will be required for the project is discussed in paragraphs 62 and 63 of the report of the Secretary-General. As indicated, of the 54 posts required for the operation and maintenance of the Earth stations, it is proposed to meet the cost of 29 posts from the regular budget. However, of these 29 posts it is estimated that the cost of 25 posts could be met from within the existing resources, while the additional posts would entail $307,000 for the biennium 1994-1995 in recurrent costs under the regular budget (see para. 23 above).

Costs proposed to be assigned to budgets of peace-keeping operations

26. As shown in table 5 of the report of the Secretary-General, the amount of $3,012,300 (recurrent costs) as a contribution from peace-keeping budgets for satellite leases has already been budgeted for telecommunications requirements in existing operations. An additional recurrent cost of $753,400 has been shown for staff costs, bringing the total recurrent costs for 1994-1995 to $3,765,700. The Advisory Committee was informed that, for reasons indicated in paragraph 69 of the report of the Secretary-General, 25 of the additional 54 posts required would come from peace-keeping operations. The Committee requested a functional breakdown of these additional posts, which was provided (see annex III below).

27. The 1994-1995 share ($4,850,000) which the Secretary-General proposes to charge to peace-keeping operations as non-recurrent requirements relates to the satellite Earth stations for the European hub, the upgrade of the Earth station at New York, the related costs and the 15 portable Earth stations.

Rationale for cost sharing: potential savings

28. The Advisory Committee inquired into the relationship between the budgets of peace-keeping operations and the regular budget in the proposed enhancement of the telecommunications system, as well as into the rationale for cost-sharing between the budgets of peace-keeping operations and the activities funded by the regular budget.

29. The Advisory Committee was informed that, as indicated in paragraph 60 of the report of the Secretary-General, the major benefits of the estimated reduction in communications costs expected from the implementation of the proposed satellite network would be to the budgets of peace-keeping operations (see paras. 30 and 31 below). The Secretary-General was therefore proposing that contributions from peace-keeping operations should support the installation and the expansion of the network. However, it is not clear to the Advisory Committee the basis on which specific amounts have been apportioned to the peace-keeping operations and to the regular budget. The Advisory Committee requests the Secretary-General to develop a simple formula for the equitable apportionment of these costs, taking into account, inter alia, usage and volume of traffic.

30. As indicated in paragraph 56 of the report of the Secretary-General, current telecommunications requirements of peace-keeping operations are being provided by a combination of United Nations Earth stations, INMARSAT and national telecommunications networks. The utilization costs for INMARSAT usage average $6.50 per minute. In addition to the four- to six-month delay which an operation now encounters in the acquisition and installation of a hub station to establish both domestic and international telecommunications service, the capital cost for the installation of the station and the international gateway exchange (excluding the domestic link, i.e., the internal connections within a mission area), is approximately $500,000; the stations and associated equipment are also currently purchased or leased from INMARSAT at a very high cost. The Advisory Committee was informed that in the past the leasing of INMARSAT equipment was less cost-effective and that the United Nations therefore owns most of its INMARSAT terminals.

31. As indicated in paragraph 73, as well as in table 3, of the report of the Secretary-General, it is anticipated that, when the proposed enhanced system becomes operational, total biennial communications expenditures of the United Nations under the regular budget would amount to $12.5 million 1/ as compared to $16.1 million, and that, in respect of peace-keeping operations, current biennial expenditures for communications, which amount to $22.8 million, would be reduced to $7.2 million. On that basis, it is estimated that the one-time cost of acquisition and installation of the Earth stations could be recovered within a year from savings under communications requirements of both the regular budget and the budgets for peace-keeping operations. The recurrent requirements

for peace-keeping operations would also be substantially less (see para. 33 below).

32. At the present time the United Nations has an inventory of approximately 240 INMARSAT terminals, about 20 of which are owned by individual military contingents but entail user charges for the United Nations. The Committee was informed that on installation of the proposed satellite network only about 25 per cent of the existing INMARSAT terminals would be retained on a contingency basis, while the balance of the terminals would be sold at an estimated value of $5,000 to $10,000 each. The Advisory Committee was informed that the proceeds from the sale of INMARSAT terminals, together with existing budgetary provisions, could be used to acquire VSAT terminals which do not entail user charges.

33. Details of potential savings under the proposed satellite network are discussed in paragraphs 52 to 58 of the report of the Secretary-General; potential savings, at 1994-1995 rates, for the biennium 1996-1997 (the first biennium of full operation), after deducting the cost of implementation of the new system are projected at $7,751,900, based on the assumption of stabilized requirements at the present level and cost-sharing arrangements proposed by the Secretary-General. Table 3 of the report of the Secretary-General provides details on the projected net savings. As shown in that table, projected regular budget savings amount to $3,553,400, while savings for peace-keeping operations are projected at $15,600,000, for a total projected amount of $19,153,400 in savings, offset by the cost of implementation of the project, leaving a total projected savings of $7,751,900.

34. The Advisory Committee trusts that the enhanced United Nations telecommunications satellite system, as proposed by the Secretary-General, will be completed as outlined in his report and in the time-frame of the biennium 1994-1995. Subject to this and bearing in mind the Advisory Committee's observations and comments in paragraph 19 above, the Advisory Committee recommends acceptance of the proposals of the Secretary-General. However, in view of the savings envisaged in the conversion of the existing facilities to the proposed network and the income from the sale of such items as the INMARSAT terminals, the Advisory Committee does not recommend any additional appropriation of funds at this time; the Advisory Committee will revert to this matter in the context of the first performance report, on the basis of which such additional appropriation as may be necessary can be considered.

Notes

1/ This amount takes into account the total communications expenditures, including those incurred for maintaining the terrestrial back-up (see para. 7 above) leased lines.

Annex I

LETTER DATED 15 JULY 1993 FROM THE CHAIRMAN OF THE ADVISORY COMMITTEE ON ADMINISTRATIVE AND BUDGETARY QUESTIONS TO THE SECRETARY-GENERAL

1. The Advisory Committee on Administrative and Budgetary Questions has considered your report dated 8 April 1993 relating to arrangements for the introduction of a common telecommunications system for the United Nations (A/CN.1/R.1169).

2. The Advisory Committee notes that this particular subject has been before the Committee and the General Assembly for sometime now. In fact your current proposal is in response to the Committee's recommendation to the forty-sixth session of the General Assembly for a comprehensive proposal for expansion of the existing telecommunications network to be submitted by you (see A/46/7/Add.12). At that time, the Advisory Committee had also recommended that your report include the implementation schedule, cost estimates and plan of financing together with a cost-benefit analysis, comparing the rates of national/commercial communication carriers with the current and proposed rates of the United Nations networks. Additionally, the Committee believed that the operational arrangements for implementation of a common carrier system needed to be further developed together with cost estimates, in close consultation with the specialized agencies.

3. As stated in paragraph 4 of your report, based on the study carried out by the Electronic Services Division in association with the International Telecommunication Union (ITU), a satellite-based telecommunications network with a terrestrial back-up would be the most cost-effective configuration for the United Nations.

4. As stated in paragraph 13 of the report, after review of the United Nations telecommunications requirements, you recommend that "the United Nations adopt the INTELSAT Business Service-type (IBS) earth station for its primary and secondary nodes and use and appropriate mix of both IBS and the Very Small Aperture Terminal (VSAT) technologies as and when required within the INTELSAT environment". Further information as to the network design and location are given in paragraphs 14 to 20 of your report. For reasons given in paragraph 5 of your report, you propose the configuration of an initial backbone satellite network as an interim step towards a global telecommunications network.

5. The Advisory Committee was informed that with the implementation of the project there would be biennial savings of over $1.7 million achieved in leased line charges, over $1.2 million in public switched network charges and about $23.6 million in reduced INMARSAT charges.

6. The Advisory Committee welcomes the benefits outlined in your report and appreciates your efforts to address the Committee's concerns. The Committee is, however, unable to assess the full cost-benefit implications of the initial network in the absence of relevant information on the proposed global network, of which this is the first step, and the details relating to subsequent phases.

Final approval for your proposal will have to be sought from the General Assembly at its forty-eighth session. The report provided to the Advisory Committee can serve as the basis for your submission to the General Assembly but the Committee believes that in addition to what is indicated above, greater attention needs to be given to a number of matters including:

(a) A brief background of the different options considered by you and a rationale for your selection of this particular option;

(b) An indication of comparative rates of national/commercial carriers vis-à-vis your proposal;

(c) An analysis of the level of telecommunications traffic relating to activities funded from regular budget and peace-keeping operations;

(d) The rationale for the sharing of financing as outlined in your report, with an indication of possible other options in the financing of the capital and ongoing costs of the network;

(e) Details as to specialized agencies' involvement in the proposal, including the possibility of their sharing in the capital costs;

(f) Other details, including questions of organizational control, management and supervision;

(g) Administrative policy and procedures relating to tariffs, billing, etc.

7. With regard to staffing provisions, the Advisory Committee believes that your current report does not identify the entity or organizational structure within which the posts will be placed, particularly at the completion of the project. Furthermore, the information provided seems to indicate that the 54 posts envisaged by you would relate solely to the technical aspects of the project. Presumably a project of this nature and magnitude, where it is envisaged to provided competitive services to users, would require administrative backstopping.

8. Pending the submission of your report to the General Assembly, you may wish to proceed as necessary (but without financial implications) to ensure that, should the General Assembly give its approval, execution could commence forthwith.

Annex II

COMPARISON OF TELEPHONE RATES

Calls originating in New York
(Standard rates per minute)

Country/ city	United Nations network rates	Discount commercial rates	Published commercial rates	Foreign rates to New York	1993 United Nations network traffic (in minutes)	Equivalent commercial costs	Equivalent network costs	Cost variance
Austria	0.85	0.89	1.90	1.50	44 751	85 026.90	38 038.35	46 988.55
Chile	0.85	1.09	2.36	1.45	69 122	163 127.92	58 753.70	104 374.22
Ethiopia	0.85	1.77	3.24	5.11	13 360	43 286.40	11 356.00	31 930.40
France	0.85	0.74	1.78	1.00	75 260	133 962.80	63 971.00	69 991.80
Kenya	0.85	1.45	2.81	3.00	11 715	32 919.15	9 957.75	22 961.40
Switzerland	0.85	0.86	2.02	1.00	299 801	605 598.02	254 830.85	350 767.17
Thailand	0.85	1.80	4.11	1.82	51 401	211 258.11	43 690.85	167 567.26
Jordan	0.85		3.59	2.84		.	.	.
Angola	0.85	2.08	4.14	N/A	92 743	383 956.02	78 831.55	305 124.47
Somalia	0.85	8.41	4.91	N/A	247 387	1 214 670.17	210 278.95	1 004. 391.22
Iraq	0.85	1.85	3.59	N/A	560	2 010.40	476.00	1 534.40
Israel	0.85	1.55	3.13	1.55	17 352	54 311.76	14 749.20	39 562.56
Kuwait	0.85	1.46	3.31	1.83	29 484	97 592.04	25 061.40	72 530.64
Lebanon	0.85	3.23	3.35	N/A	28 829	96 577.15	24 504.65	72 072.50
Syria	0.85	1.58	3.07	N/A	16 494	50 636.58	14 019.90	36 616.68
Cyprus	0.85	1.20	2.32	2.45	3 217	7 463.44	2 734.45	4 728.99
Pakistan	0.85	2.02	4.62	N/A	5 446	25 160.52	4 629.10	20 531.42
Cambodia	0.85	N/A	2.32	N/A	23 488	54 492.16	19 964.80	34 527.36
El Salvador	0.85	1.21	2.25	5.00	49 232	110 772.00	41 847.20	68 924.80

Country/ city	United Nations network rates	Discount commercial rates	Published commercial rates	Foreign rates to New York	1993 United Nations network traffic (in minutes)	Equivalent commercial costs	Equivalent network costs	Cost variance
Yugoslavia	0.85	1.74	2.32	N/A	52 318	121 377.76	44 470.30	76 907.46
Mozambique	0.85	2.69	3.59	N/A	-	-	-	-
El Aaiun	0.85	2.04	2.73	8.70	59 838	183 357.74	50 882.30	112 495.44
Total					1 191 798	3 857 557.04	1 013 028.30	2 844 528.74

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Annex III

FUNCTIONAL DESCRIPTION OF ADDITIONAL POSTS

A. Professional posts

1. The main functions of the P-4 posts would be the overall supervision of the telecommunication services unit of the field offices. In close coordination with the Electronic Services Division of the Office of General Services at Headquarters, these units will provide support to peace-keeping field operations in carrying out planning and budgeting for the telecommunication system; establish and enforce operation and maintenance procedures; administer all local telecommunications contracts and ensure system security.

B. General Service and local posts

2. The General Service and local posts at each field office will carry out both technical and administrative duties. The technical functions include: the operation of the satellite Earth stations and related telecommunications, and maintenance of established operational procedures. The administrative functions include: billing and charge back, preparing the database of telecommunication services and users, training of users on new telecommunication services and operations, updating the local component of the centralized spare parts management system and ordering and procurement of telecommunication equipment and services.